

**Abstract**

Disclosed are a nano-structured metal-carbon composite and a process for preparation thereof. More specifically, a nano-structured metal-carbon composite is prepared by continuously impregnating a transition metal precursor and a carbon precursor into a nano template and reacting the resultant mixture at high temperature. In the composite according to the present invention, metal is regularly multi-dispersed in a size of less than 1 nano meter, and metal and carbon are chemically bonded, thereby exhibiting the highly excellent hydrogen storage capacity.